What is claimed is:

1. A composition comprising a plurality of conjugates each conjugate having one to three water-soluble polymers covalently attached to a Factor VIII moiety, wherein each water-soluble polymer has a nominal average molecular weight in the range of greater than 5,000 Daltons to about 150,000 Daltons.

2. The composition of claim 1, wherein the water-soluble polymer in each conjugate is selected from the group consisting of a poly(alkylene oxide), poly(vinyl pyrrolidone), poly(vinyl alcohol), polyoxazoline, and poly(acryloylmorpholine)

3. The composition of claim 2, wherein each water-soluble polymer is a poly(alkylene oxide).

4. The composition of claim 3, wherein each poly(alkylene oxide) is a poly(ethylene glycol).

5. The composition of claim 4, wherein the poly(ethylene glycol) is terminally capped with an end-capping moiety selected from the group consisting hydroxy, alkoxy, substituted alkoxy, alkenoxy, substituted alkenoxy, alkynoxy, substituted alkynoxy, aryloxy and substituted aryloxy.

6. The composition of claim 4, wherein the poly(ethylene glycol) is terminally capped with methoxy.

7. The composition of claim 4, wherein the poly(ethylene glycol) is terminally capped with hydroxy.

8. The composition of claim 4, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 6,000 Daltons to about 100,000 Daltons.

9. The composition of claim 8, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 10,000 Daltons to about 85,000 Daltons.

10. The composition of claim 9, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 20,000 Daltons to about 85,000 Daltons.

11. The composition of claim 10, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 53,000 Daltons to about 75,000 Daltons.

12. The composition of claim 3, wherein each water-soluble polymer is linear.

13. The composition of claim 3, wherein each water-soluble polymer is branched.

14. The composition of claim 3, wherein the Factor VIII moiety is selected from the group consisting of Factor VIII, Factor VIIIa, Factor VIII:C, Factor VIII:vWF, B-domain deleted Factor VIII, and biologically active fragments, deletion variants, substitution variants or addition variants of any of the foregoing.

15. The composition of claim 14, wherein the Factor VIII moiety is selected from the group consisting of Factor VIII, Factor VIIIa, Factor VIII:C, and Factor VIII:vWF.

16. The composition of claim 14, wherein the Factor VIII moiety is B-domain deleted Factor VIII.

17. The composition of claim 3, wherein the Factor VIII moiety is recombinantly derived.

18. The composition of claim 3, wherein the Factor VIII moiety is blood-derived.

19. The composition of claim 3, wherein the composition is substantially free of albumin.

20. The composition of claim 3, wherein the composition is substantially free of proteins that do not have Factor VIII activity.

21. The composition of claim 3, wherein the composition is substantially free of noncovalently attached water-soluble polymers.

22. The composition of claim 3, wherein at least one water-soluble polymer is covalently attached to a site in the active form of the moiety having Factor VIII activity.

23. The composition of claim 1, in lyophilized form.

24. The composition of claim 1, in the form of a liquid.

25. The composition of claim 1, further comprising a pharmaceutically acceptable excipient.

26. The composition of claim 1, wherein each conjugate comprises an amide linkage.

27. The composition of claim 1, wherein each conjugate comprises a secondary amine linkage.

28. The composition of claim 1, wherein each conjugate comprises a carbamate linkage.

29. The composition of claim 1, wherein each conjugate comprises a thioether linkage.

30. The composition of claim 1, wherein each conjugate comprises a disulfide linkage.

31. A composition comprising a plurality of monoPEGylated Factor VIII moiety conjugates.

32. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises one poly(ethylene glycol) terminally capped with an end-capping moiety selected from the group consisting hydroxy, alkoxy, substituted alkoxy, alkenoxy, substituted alkenoxy, alkynoxy, substituted alkynoxy, aryloxy and substituted aryloxy.

33. The composition of claim 31, wherein the poly(ethylene glycol) is terminally capped with methoxy.

34. The composition of claim 31, wherein the poly(ethylene glycol) is terminally capped with hydroxy.

35. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a poly(ethylene glycol) having a nominal average molecular weight in the range of greater than 5,000 Daltons to about 150,000 Daltons.

36. The composition of claim 35, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 6,000 Daltons to about 100,000 Daltons.

37. The composition of claim 36, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 10,000 Daltons to about 85,000 Daltons.

38. The composition of claim 37, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 20,000 Daltons to about 85,000 Daltons.

39. The composition of claim 38, wherein the poly(ethylene glycol) has a nominal average molecular weight in the range of from about 53,000 Daltons to about 75,000 Daltons.

40. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a linear poly(ethylene glycol).

41. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety comprises a branched poly(ethylene glycol).

42. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a Factor VIII moiety selected from the group consisting of Factor VIII, Factor VIIIa, Factor VIII:C, Factor VIII:vWF, B-domain deleted Factor VIII, and biologically active fragments, deletion variants, substitution variants or addition variants of any of the foregoing.

43. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a Factor VIII moiety selected from the group consisting of Factor VIII, Factor VIIIa, Factor VIII:C, and Factor VIII:vWF.

44. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises B-domain deleted Factor VIII.

45. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a Factor VIII moiety that is recombinantly derived.

46. The composition of claim 31, wherein each monoPEGylated Factor VIII moiety conjugate comprises a Factor VIII moiety that is blood-derived.

47. The composition of claim 31, wherein the composition is substantially free of albumin.

48. The composition of claim 31, wherein the composition is substantially free of proteins that do not have Factor VIII activity.

49. The composition of claim 31, wherein the composition is substantially free of noncovalently attached water-soluble polymers.

50. The composition of claim 31, in lyophilized form.

51. The composition of claim 31, in the form of a liquid.

52. The composition of claim 31, further comprising a pharmaceutically acceptable excipient.

53. The composition of claim 31, wherein each conjugate comprises an amide linkage.

54. The composition of claim 31, wherein each conjugate comprises a secondary amine linkage.

55. The composition of claim 31, wherein each conjugate comprises a carbamate linkage.

56. The composition of claim 31, wherein each conjugate comprises a thioether linkage.

57. The composition of claim 31, wherein each conjugate comprises a disulfide linkage.

58. A method for making a conjugate comprising contacting, under conjugation conditions, a Factor VIII moiety with a polymeric reagent.

59. A method for treating a patient in need of Factor VIII therapy, comprising the step of administering to the patient the composition of claim 1 or claim 31, wherein the composition contains a therapeutically effective amount the conjugates.

60. The method of claim 59, wherein the patient is suffering from hemophilia A.

61. The method of claim 59, wherein the patient is administered the composition within two days prior to undergoing surgery.